

Attorney Docket No: MSL-1



Patent

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
Before the Board of Patent Appeals and Interferences

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In re Application of: Marc Ivor John Beale

Application No.: 09/980,955

Group Art Unit: 2629

Filed: December 4, 2001

Examiner: Leonid Shapiro

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For: COMMUNICATION SYSTEM AND METHOD

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**APPEAL BRIEF**

**INTRODUCTION**

Pursuant to 37 CFR 41.37, Appellant hereby submits this brief in support of his appeal to the Board of Patent Appeals and Interferences from the decision of the examiner twice rejecting his claims.

The requisite Notice of Appeal was filed on September 13, 2010, together with a Pre-Appeal Brief Request for Review, and the required official fees. The Notice of Panel Decision from Pre-Appeal Brief Review was mailed October 29, 2010, resetting the time period for filing of this Brief to November 29, 2010; a petition for one-month extension of time (or for such further extension as may be needed) is incorporated hereinto.

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## **I. REAL PARTY IN INTEREST**

The real party in interest in this matter is Malvern Scientific Solutions Limited (a British Company), the assignee of record.

## **II. RELATED APPEALS AND INTERFERENCES**

NONE

## **III. STATUS OF CLAIMS**

Claims 1 through 40 are in the proceedings. Claims 2, 4, 5, 10, 15, 21, 23, 24, and 34 stand withdrawn from consideration, pursuant to a restriction requirement and Appellant's election. Claims 1, 3, 6 through 9, 11 through 14, 16 through 20, 22, 25 through 33 and 35 through 40 stand rejected, and the rejection thereof is herewith being appealed.

## **IV. STATUS OF AMENDMENTS**

The most recent final rejection was mailed in the subject application on November 24, 2009. Although a Request for Continued Examination, together with a Response (to the previous Action), was submitted on April 22, 2010, no amendment was filed subsequent to that final rejection

## **V. SUMMARY OF CLAIMED SUBJECT MATTER**

The subject matter of the invention, as broadly defined in each of the independent claims involved in the appeal, i.e., claims 1, 20, and 39, is illustrated, inter alia, in figures 1 through 3 of the drawings (to which reference is hereinafter made, and in which appear the

elements and components designated hereinbelow by bold reference numbers), and is described in the specification text referred to below by page and line numbers. Although independent claims 1 and 39 recite “means having a surface,” no “means plus function” limitation, permitted by 35 U.S.C. 112, sixth paragraph, is presented.

More particularly, as disclosed at line 30 on page 11 through line 5 on page 12 of the specification, the present invention, as broadly defined in independent claims 1 and 39, is directed to a communication (symbol entry) system and, as broadly defined in independent claim 20, is directed to a method of communication. The communication (symbol entry) system shown in Figure 1 comprises an octagonal arrangement of eight trapezoidal regions **1**, used by way of a movable cursor **3** (alternative pointing devices are disclosed), with an octagonal region **5** being provided substantially as the center of the regions **1**.

As explained at lines 7 through 13 on page 12, the cursor **3** is moved upwardly from the central region **5** into the trapezoidal regions **1** containing the symbols **7**, for the letters A, B, C and D, to activate them. The cursor **3** may then be moved horizontally out of the region **1**, in a predetermined direction (bearing), to select the letter B.

As explained in the specification, the predetermined bearing, along which the pointing device moves within the communication region, is parallel to a direction of the desired symbol relative to a central region of the communication region, and the system is responsive to the user-controlled pointing device independent of the location within the communication region at which movement along the predetermined region commences, as is recited in each of Claims 1, 20 and 39. More specifically, the passage at line 29 on page 2 through line 13 on page 3 discloses:

An ideal direction of movement is a line from a central area of a region to a desired symbol. Movement in a predetermined direction may be detected, for

example by analysing the direction (or bearing) of movement of the pointing device rather than the location thereof. Thus, in practice the location of movement need not be restricted to the ideal direction, but rather may be generally parallel to the ideal direction. Such a method of analysis is particularly beneficial in that it makes the system very tolerant of imprecision relating to the pointing device. Thus, the movement maybe offset relative to the location of the symbol to be selected, or may have a variable length. Further the actual direction need not be precise, but may be within a tolerance ... Moreover, the movement need not be linear, curved movement being accommodated by determining an average direction.

In the sentence at lines 13 through 15 on page 14, it is taught that use of the system of the invention “ ... allows for intuitive and physiologically convenient movements ... without need for undue precision.” At lines 1 and 2 on page 16 it is taught that letters can be “... selected by a simple ... movement in the appropriate direction.”

The communication system shown in Figure 2 is described at lines 29 through 37 on page 12 to comprise “... a quadrilateral (or orthogonal) arrangement of regions **11** provided on a touch-sensitive pad **13** ... or a touch-sensitive screen ... which may be operated by a pointing device in the form of a single finger or a pointing stick.” “Each region **11** has eight symbols **15** associated with it to allow selection ... by movement of the pointing device in the appropriate direction.”

It is pointed out on page 13, at lines 6 through 10, that “The position of a finger within a region **11** is not critical and, although the direction of movement needs to distinguish between adjoining directions, the precise direction is not critical and operation of the system very user-friendly.”

The communication (symbol entry) system shown in Figures 3a, 3b and 3c is taught, at lines 20 through 34 on page 15, to be a development of the system of Figure 2, and to consist of three regions **21** provided on a touch-sensitive pad **23**. Each region **21** may be operated by a pointing device, and has eight associated symbols **25**. The symbols **25** are arranged “...

at the corners of a square and substantially midway between adjacent corners to allow selection of any one of those symbols by movement of a finger in the appropriate direction ...”

Further description of the illustrated embodiment is provided at lines 1 through 15 on page 16, in accordance with which the lower case letters of Figure 3a “... are selected by a simple swiping movement in the appropriate direction (up, down, sideways or diagonal).”... “Further symbols are selected as shown in Figure 3b by a predetermined right-angle swiping movement ...” and “[S]till further symbols as shown in Figure 3c are selected by a swiping movement in a predetermined direction followed by a further swiping movement reversing the first movement (that is a back-and-forth movement).”

Dependent Claims 3, 6-14, 16-9, 22, 25-33, 35-38, and 40 are not argued separately, under the provisions of paragraph (c)(1)(vii) of 37 CFR 41.37.

## **VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL**

The sole issue in this Appeal is whether Claims 1, 20 and 39 would have been obvious, under 35 U.S.C.103(a), over Vayda et al. United States Patent No. 5,745,717 in view of McCloud United States Patent No. 5,808,567. The dependent claims are regarded by Appellant to be patentable along with Claims 1, 20 and 39 of the application, and are not argued separately.

It is the Examiner’s contention<sup>1</sup> that Vayda et al. “ ... discloses a communication system comprising: means defining a communication region having associated therewith a plurality of symbols (fig. 3-6, 8-11. For example in see fig. 5 “*EDIT, PRINT, TOOLS, SET-UP*” (col. 6, lines 23-45) and being responsive to a user controlled pointing device (fig. 7 (713))

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<sup>1</sup> Appellant quotes extensively from the Office Action mailed June 14, 2010, to avoid any compromise, by paraphrasing, of the Examiner’s statements of the grounds of rejection.

whereby a desired symbol can be selected by detecting movement of the pointing device along a predetermined bearing with the communication region (col. 7, lines 9-34), being offset relative to the location of the symbol to be selected (col. 7, lines 35-44, see where the symbols “*EDIT, PRINT, TOOLS, SET-UP*” are angularly separated and tolerance (or offset) is inherent in such latitude of movement).”

It is the Examiner’s further contention that “Vayda teaches system being responsive to said user-controlled pointing device independent of the location with said communication region at which movement along said predetermined bearing commences (col. 4, lines 41-45).”

The Examiner acknowledges that Vayda et al. do “... not disclose the predetermined bearing being substantially parallel to a direction of the desired symbol of the like relative to a central region of the communication region.” He contends however that “McCloud teaches the predetermined bearing being substantially parallel to a direction of the desired symbol of the like relative to a central region of the communication region (in reference to movement from letter A to G is parallel to movement for E to H) (figs. 10-11 and col. 9 lines 40-57).”

The Examiner concludes: that “It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate teachings of McCloud into Vayda reference in order to input information into a large variety of different electronic devices (col. 1, lines 51-53 in the McCloud reference).” The Examiner advises Appellant to “Notice that finger on touch pad, mouse are user-controlled pointing device independent of the location within said communication region at which movement along said predetermined bearing commences versus key board dependable on location.”

With specific regard to claim 39, the Examiner contends that "... McCloud teaches defining a plurality of communication regions each substantially in the form of a square having symbols associated therewith substantially at corners of the square and substantially mid-way along each side of the square, each communication region (in reference letters A to G) ( fig. 10)."

## VII. ARGUMENT

Appellant submits that the rejections are based upon a misreading and misapplication of the prior art by the Examiner, and upon a failure to properly comprehend Appellant's arguments.

As noted above, the Examiner contends that Vayda et al. disclose a communication system whereby a desired symbol can be selected by detecting movement of the pointing device along a predetermined bearing within the communication region. That is incorrect. The contention is a mere generalization of the disclosure of Vayda et al. at lines 9 through 34 of column 7, and is thus an inaccurate characterization of the fair teaching of the patent. Vayda et al. actually disclose:

A slight movement of user input device 106 "snaps" highlighter 306 from focus position 304 to a command selector 308 (represented by a name or an icon) that appears in the *radial direction* most closely correlated to the movement of the user input device 106. (emphasis added)

That is, and as will be discussed more fully below, Vayda et al. disclose movement only in a radial direction.

Moreover, as also noted above, the Examiner contends that Vayda et al. disclose "... movement of the pointing device along a predetermined bearing ... being offset relative to the location of the symbol to be selected." There is no such disclosure in the cited passage of

Vayda et al., at lines 35 through 44 of column 7 or elsewhere in the patent. It is appreciated that the reference does disclose, at lines 32 through 34 of the same column, that "... the radius along which the highlighter 306 moves is the one most closely correlated to the movement of the user input device 106."

*The Fair Teaching of Vayda et al.*

Accurately and fairly considered, the disclosure of Vayda et al. is that movement of the pointing device is in a radial direction from a focus position, and that the symbol selected is the one which correlates most closely to the direction of radial movement. The further teaching of Vayda et al. is that the selection and execution of commands requires that movement be started from a predetermined central region, and then be effected in a predetermined direction. There is no option to respond to movement independent of the location within the communication region at which such movement commences, as is enabled by the present invention.

In sharp contrast, according to Claims 1 and 20 and 39 of the present application:

movement is along a bearing which is parallel to a direction of the desired symbol relative to a central region of the communication region; and

symbol selection is independent to the location within the communication region at which movement along the bearing commences.

The foregoing distinctions contribute significantly to the usability of the claimed communication system and method, which system and method is not taught, is not suggested, and is not achieved by Vayda et al.

As noted above, the Examiner has responded to those facts by commenting:

Notice that finger on touch pad, mouse are user-controlled pointing device [sic] independent of the location within said communication region at which



movement along said predetermined bearing commences versus key board dependable on location.

All claims of the instant application require however that selection of a desired symbol be effected by movement of a user-controlled pointing device *on or proximate the surface*<sup>2</sup> of the communication region. Thus, a touch pad (that does not itself include a communication region, as herein defined), a mouse, or another form of remote device does *not* constitute a “user-controlled pointing device,” as defined in Claims 1, 20, and 39. It is irrefutable that Vayda et al. do *not* teach or suggest any user-controlled pointing device that is independent of the location, within the communication region, at which movement commences.

The Examiner has drawn attention to Figures 3 through 6 and 8 through 11 of Vayda et al., and particularly to Figure 5. Applicant submits that Figure 5 is not an apt example however because it does not show, and the corresponding text does not explain, how a user-controlled input device is employed in relation to the focus position 504 and command indicator sectors 514. An input device is shown in the embodiment of Figure 7, but it is not mentioned in the corresponding text and there is no explanation there as to how it is employed.

On the other hand, Figure 3 illustrates the basic principles of the Vayda et al. system, and the corresponding text explains how it works. As discussed in column 6, at lines 23 through 51, menu screen 300 comprises a select/execute menu 302, which in turn comprises a focus position 304. A plurality of select/execute command selectors are radially distributed about the focus position 304, as depicted in Figure 3 by large dots.

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<sup>2</sup> This language accommodates movement of the pointing device either out of contact with, or above, the surface, as disclosed, for example, at lines 33 to 36 on page 11 of the specification, and at lines 12 to 22 on page 13.

As explained in column 7, at lines 9 through 51, the select/execute menu 302 initially has a highlighter 306 placed at, or substantially at, the focus position 304. Movement of user input device 106 (preferably a mouse, as disclosed in column 4, at lines 41 through 51, and depicted in Figure 1 as a remote computer mouse) moves the highlighter 306 radially from its initial position, at focus position 304, to a command selector 308 in the radial direction most closely correlated to the movement of the user input device 106. That is, in Figure 3 movement of the user input device 106 causes the highlighter 306 to cease highlighting the focus position 304 and instead to highlight the displayed word "EDIT," or a region surrounding the word "EDIT." When selected, the highlighted command selector 308 is executed.

It is acknowledged that Vayda et al. allows for some variation in angle, but movement of the highlighter 306 *in a radial direction from a focus position* is required at all times.

Vayda et al. point out that their system can be difficult to use. It is explained in column 8, at lines 27 through 49, that errors may occur due to sensitivity to movement of the user input device 106. Consequently, for example, simple movement of the input device 106 may not cause execution of the highlighted command selector 308 without further action.

Figure 4 of Vayda et al. shows a focus position 404; Figure 6 has a central "ALTER FILE MENU" position; Figure 7 shows a focus position 704; Figure 8 has a central "FILE MGT" position; Figure 9 has a central "FILE MGMNT" position indicated by highlighter 906, the highlighter being transferred to a command selector on movement of the user input device 106; Figure 10 has a central "FILE MGT" position; Figure 11 has a central focus position 1104; Figure 12 has a central focus position 1204; Figure 13 has a substantially central focus position 1304; Figure 14 has a central focus position 1404; Figure 15 has a central focus position 1504; Figure 16 has a central focus position 1604; Figure 18 has a central focus position

1804; Figure 19 has a central focus position 1904; and Figure 20 has a central focus position 2004.

The true disclosure and teaching of Vayda et al. are therefore only of a system that has a substantially central focus position, and only that movement of a user-controlled input device, in a radial direction from the central focus position, causes selection of a command selector. Although some flexibility in the radial direction selected is permitted, the requirements are invariably (1) to start at the central focus position, and (2) to move in a radial direction.

Thus, Claim 1 (and the other independent claims) are distinguished over Vayda et al. for two fundamental reasons:

(1) Appellant's claims require movement along a bearing parallel to a direction of the desired symbol relative to a central region of the communication region; and

(2) Appellant's claims require that the system be responsive to the user-controlled pointing device independent of the location within the communication region at which movement along the predetermined bearing commences.

With regard to reason (1), according to the *Shorter Oxford English Dictionary*, for example, the word "parallel" means "lying or extending alongside of one another and always at the same distance apart." Consequently, a bearing that is parallel to a direction based on a central region of the communication region cannot pass through that central region, but instead must lie or extend alongside the central region.

This is obviously contrary to the requirement of Vayda et al. that movement must always start from a central focus position. At no point do Vayda et al. teach or suggest that movement should, or could, start from a position alongside the central focus position.

With further regard to reason (1), Vayda et al. never use the word "parallel," but instead consistently use the word "radial." It is obvious that a bearing that extends radially from a

given location *cannot* extend parallel to a line through the same location. The two lines must either be coincident -- or they must diverge/converge.

With regard to fundamental reason (2), Vayda et al. always require movement to start from the central focus position; no alternative is taught or suggested. This is directly contrary to Applicant's claims which, once again, require that the system response be independent of the location within the communication region at which movement commences.

Claim 39 requires the system to comprise a plurality of communication regions, each being substantially in the form of a square and having symbols associated therewith at predetermined locations about the square. In contrast, Vayda et al. do not consider more than a single communication region, and they certainly do not consider the arrangement of symbols set forth in Claim 39. These distinctions are of course in addition to those hereinabove discussed.

#### *The Fair Teaching of McCloud*

The Examiner deems the secondary reference, to McCloud, to satisfy *the acknowledged* deficiency of Vayda et al.; i.e., to teach the predetermined bearing being substantially parallel to a direction of the desired symbol or the like relative to a central region of the communication region. The Examiner has drawn attention to Figures 10 and 11, and lines 40 through 57 in column 9 of McCloud, and has evidently argued that, in accordance with the identified disclosure, movement from letter A to G is parallel to movement from E to H.

McCloud provides a communication apparatus which has nine selector pad switches arranged in a 3 x 3 pattern, together with two address switches which are used in conjunction with the selector pad switches to provide thirty-six options (see, for example, lines 1 through

27 in column 2). The operator uses an index finger to select a selector pad, and a thumb and middle finger to select one or more of the address switches, if desired. Selection is made by touching the required selector pad (see, for example lines 8 through 15 in column 6) with sufficient pressure to make the selector pad switch connector 27 contact the corresponding common connector pattern 47.

Consequently, it is evident that McCloud does not select symbols as a result of movement in a *radial* direction, as required by Vayda et al. And McCloud does not select symbols as a result of movement along a bearing *parallel* to a direction of the desired symbol relative to a central region of the communication region, as required by the present invention. Rather, McCloud requires movement in a direction *perpendicular* to the plane of the communication region in order to apply sufficient pressure to make a contact and to operate a switch pad.

McCloud clearly fails to provide the disclosure needed to cure the deficiency acknowledged by the Examiner to exist in Vayda et al.

With further regard to the Examiner's assertion that movement from letter A to G in the McCloud apparatus is parallel to movement from letter E to H, while the directions may be parallel the effects of such movements are highly significant and must be considered in the context of the rejections; i.e., in the proposed combination with Vayda et al.

More particularly, and giving due regard to the teaching of Vayda et al., movement from a focus position, at letter E, toward letter H would necessarily result in selection of letter H. Vayda et al. do not consider movement corresponding to movement from letter A toward letter G, but the reference does require movement from a focus position. If letter A were considered to be the focus position, therefore, movement toward letter G would, in accordance

with the Vayda et al. teaching, select letter D initially and *might*, only subsequently, select letter G.

Thus, in the Examiner's proposed combination of references movement from a focus position at letter A will not select letter H; and movement that does not start from a focus position will not select any letter. Therefore, with letter A as the focus position, and moving toward letter G, Vayda et al. is devoid of any teaching for selection of the letter H. The Examiner's contrary suggestion is clearly in error – and is clearly the result of an impermissible hindsight reconstruction.

In addition to the foregoing, there is no teaching in McCloud as to the manner of movement, regarding direction or bearing, between one letter and a subsequent letter. McCloud teaches only that a required selector pad is activated.

Clearly, Appellant's communication system and method produce an outcome that is significantly and substantially different from any system or method taught in or suggested by Vayda et al. and McCloud. There is simply no disclosure in Vayda et al. or McCloud, taken alone or together, of either:

movement along a bearing which is parallel to a direction of the desired symbol relative to a central region of the communication region; or

symbol selection independent of the location within the communication region at which movement along the bearing commences.

Once again, the clear and unequivocal teaching of Vayda et al. is that any movement, for selection and implementation, must extend in a radial direction, and must start at a central focus position. All of Applicant's claims, on the other hand, require that movement occur in a direction parallel to a direction based on a central region of the communication system, thus precluding passage through the central region. The term "parallel" and "radial" are mutually

exclusive, and the disclosure and teaching of Vayda et al. therefore excludes the subject matter of Claims 1, 20 and 39.

Moreover, all claims require the system response to be independent of the location at which movement commences. This is patently inconsistent with the requirement of Vayda et al. that movement must start from the central focus position.

McCloud does not cure the fundamental deficiencies of Vayda et al.

### *The Examiner Fails to Comprehend Appellant's Arguments*

The Examiner's "Response to Arguments," set forth on pages 6 and 7 of the June 14, 2010 Office Action, makes it clear that the Examiner does not refute Appellant's characterizations of the fair teachings of the references, and that he tacitly acknowledges that his position had, indeed, been based upon a misreading thereof. The Examiner merely reiterates, and effectively adopts, Appellant's factual presentation.

In deeming Appellant's arguments "nonpersuasive," the Examiner asserts a fundamental mischaracterization of those arguments. His position devolves to one of reliance upon the cited cases of *In re Keller*<sup>3</sup> and *In re Merck & Co.*<sup>4</sup> for the principle that "... one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references."<sup>5</sup> That is however a clear misrepresentation of Appellant's arguments.

The Examiner quotes remarks from Appellant's April 22, 2010 Response Accompanying RCE, which state in essence that Vayda et al. select symbols as a result of movement in a *radial* direction, and that McCloud requires movement in a direction *perpendicular* to the plane of the communication region. These statements obviously do not attack the references

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<sup>3</sup> *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981)

<sup>4</sup> *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed Cir. 1986)

<sup>5</sup> It should be noted that Applicant does not refute the *principle*.

individually, in the sense explicit in the cited cases. Rather, they express the irrefutable fact that *neither* reference teaches or suggests a quintessential feature that is common to all of Appellant's claims; i.e., that "a desired symbol can be selected by detecting movement ... along a predetermined bearing ... [that is] ... *parallel* to a direction of the desired symbol relative to a central region ... (emphasis added).

If neither reference discloses movement along a parallel bearing, as is the case, then it is perfectly obvious that the combination could not possibly do so.

As summarized on page 6 of Appellant's April 22, 2010 Response: "There is simply no disclosure in Vayda or McCloud, *taken alone or together* (emphasis added), of either:

movement along a bearing which is parallel to a direction of the desired symbol relative to a central region of the communication region; or

symbol selection independent of the location within the communication region at which movement along the bearing commences."

As to the feature referred to in the second subparagraph above, the Examiner quotes, in his "Response to Arguments," Appellant's assertion that "... Vayda does require movement from a focus position" (i.e., that independence of movement commencement is not taught by Vayda). The Examiner nevertheless effectively dismisses this essential distinction by again citing *In re Keller* and *In re Merck & Co.*, repeating the same patently inapplicable principle regarding individual attacks on references used in combination. Here too, therefore, since neither reference teaches or suggests the claim requirement for independence from movement commencement, as defined, it is obvious that the combination thereof could not possibly do so.

It is manifest that Appellant has not attacked the references individually. And consequently, it is manifest that, in asserting to the contrary, and in rejecting the claims on that basis, the Examiner has committed fundamental errors.




## CONCLUSIONS

The appealed claims define an invention that is clearly novel and patentable over the prior art. The rejections are manifestly in error, and should be reversed. Such an order by the Board is earnestly requested.

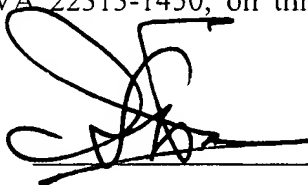
To the extent necessary, a petition for extension of time, under 37 CFR 1.136, is hereby made. Enclosed herewith is Form PTO-2038, authorizing a charge in an amount sufficient to provide the fees required for submission of this Brief and for a one-month extension of time. Please charge any deficiency, or credit any excess, in or of the payment to Deposit Account No. 502982.

Respectfully submitted,  
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## CERTIFICATE OF MAILING

I, IRA S. DORMAN, hereby certify that this Appeal Brief, including the Appendix pages i-xi, and Form-2038, are being deposited with the United States Postal Service, First Class mail, postage prepaid, in an envelope addressed to Mail Stop Appeal Brief-Patents, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on this 27th day of December, 2010.



## VIII. CLAIMS APPENDIX

The claims in the appeal are as follows:

1. A communication system comprising means having a surface and defining a communication region having associated therewith a plurality of symbols and being responsive to movement of a user-controlled pointing device on or proximate said surface, whereby a desired symbol can be selected by detecting movement of the pointing device within the communication region along a predetermined bearing, the predetermined bearing being parallel to a direction of the desired symbol relative to a central region of the communication region, said system being responsive to said user-controlled pointing device independent of the location within said communication region at which movement along said predetermined bearing commences.

3. A communication system as claimed in claim 1, wherein a plurality of symbol entry regions are provided each having associated therewith a plurality of symbols and each being responsive to the user-controlled pointing device whereby a desired symbol can be selected by movement of the pointing device within the communication region with which the desired symbol is associated, along the predetermined bearing.

6. A communication system as claimed in claim 3, wherein there are four communication regions, each region having associated therewith a plurality of symbols arranged in a predetermined manner, a desired symbol being selected by movement within the region having the desired symbol associated therewith along the predetermined bearing relative to the desired symbol.

7. A communication system as claimed in claim 3, wherein there are three communication regions, each region having associated therewith a plurality of symbols arranged in a predetermined manner, a desired symbol being selected by movement within the region having the desired symbol associated therewith along the predetermined bearing relative to the desired symbol.

8. A communication system as claimed in claim 3, wherein there are two communication regions, each region having associated therewith a plurality of symbols arranged in a predetermined manner, a desired symbol being selected by movement within the region having the desired symbol associated therewith along the predetermined bearing relative to the desired symbol.

9. A communication system as claimed in claim 1, wherein two sets of communication regions are provided.

11. A communication system as claimed in claim 1, wherein means is provided for selecting a further symbol arranged within an area encompassed by or adjacent to the first-mentioned symbols of each region by tapping the area within the desired region.

12. A communication system as claimed in claim 1, wherein means is provided for selecting further symbols by employing a different form of movement from that required to select from the basic symbols.

13. A communication system as claimed in claim 12, wherein the further symbols are selected on the basis of the speed of movement of the pointing device.

14. A communication system as claimed in claim 12, wherein the further symbols are selected on the basis of a combination of movements.

16. A communication system as claimed in claim 14, wherein the combination of movements comprise a linear movement with a dwell at the beginning and/or end thereof.

17. A communication system as claimed in claim 14, wherein the combination of movements comprise a linear movement in a first direction followed by a further linear movement reversing the preceding movement.

18. A communication system as claimed in claim 14, wherein the combination of movements comprise two sequential linear movements at a predetermined angle to each other.

19. A communication system as claimed in claim 1, wherein said means having a surface and defining a communication region comprises a touch-sensitive screen.

20. A method of communication in which a plurality of symbols are associated with a communication region and a desired symbol is selected by detecting movement of a user-controlled pointing device on or proximate a surface within the communication region along a predetermined bearing, the predetermined bearing being parallel to a direction of the desired symbol relative to a central region of the communication region, effecting of said selection being independent of the location within said communication region at which movement of the pointing device along said predetermined bearing commences.

22. A method of communication according to claim 20, wherein a plurality of symbol entry regions are provided each having associated therewith a plurality of symbols and each

being responsive to the user-controlled pointing device whereby a desired symbol can be selected by movement of the pointing device within the communication region with which the desired symbol is associated, along the predetermined bearing.

25. A method of communication according to claim 22, wherein there are four communication regions, each region having associated therewith a plurality of symbols arranged in a predetermined manner, a desired symbol being selected by movement within the region having the desired symbol associated therewith along the predetermined bearing relative to the desired symbol.

26. A method of communication according to claim 22, wherein there are three communication regions, each region having associated there-with a plurality of symbols arranged in a predetermined manner, a desired symbol being selected by movement within the region having the desired symbol associated therewith along the predetermined bearing relative to the desired symbol.

27. A method of communication according to claim 22, wherein there are two communication regions, each region having associated therewith a plurality of symbols arranged in a predetermined manner, a desired symbol being selected by movement within the region having the desired symbol associated therewith along the predetermined bearing relative to the desired symbol.

28. A method of communication according to claim 20, wherein two sets of communication regions are provided.

29. A method of communication according to claim 20, wherein at least one further region is provided separated from the first-mentioned regions for toggling between the first-mentioned set of symbols and one or more further sets of symbols to be associated with each of the regions.

30. A method of communication according to claim 20, wherein means is provided for selecting a further symbol arranged within an area encompassed by or adjacent to the first-mentioned symbols of each region by tapping the area within the desired region.

31. A method of communication according to claim 20, wherein further symbols are selectable by employing a different form of movement from that required to select from the basic symbols.

32. A method of communication according to claim 31, wherein the further symbols may be selected on the basis of the speed of movement of the pointing device.

33. A method of communication according to claim 31, wherein the further symbols may be selected on the basis of a combination of movements.

35. A method of communication according to claim 33, wherein the combination of movements comprise a linear movement with a dwell at the beginning and/or end thereof.

36. A method of communication according to claim 33, wherein the combination of movements comprise a linear movement in a first direction followed by a further linear movement reversing the preceding movement.

37. A method of communication according to claim 33, wherein the combination of movements comprise two sequential linear movements at a predetermined angle to each other.

38. A method of communication according to claim 20, wherein the region or regions are provided on a touch-sensitive screen.

39. A communication system comprising means having a surface and defining a plurality of communication regions each substantially in the form of a square having symbols associated therewith substantially at corners of the square and substantially midway along each side of the square, each communication region being responsive to movement of a user-controlled pointing device on or proximate the surface of the means having a surface and defining a plurality of communication regions, whereby a desired symbol can be selected by detecting movement of the pointing device on or proximate the surface within said each communication region along a predetermined bearing, the predetermined bearing being parallel to a direction of the desired symbol relative to a central region of said each communication region, said system being responsive to said user-controlled pointing device independent of the location within said each communication region at which movement along said predetermined bearing commences.

40. A communication system as claimed in claim 39 and including a visual output corresponding to the symbol or symbols entered.

## **IX. EVIDENCE APPENDIX**

Appellant is unaware of any evidence that is appropriate or necessary for submission in connection with this appeal.



## **X. RELATED PROCEEDINGS APPENDIX**

No decision has been rendered by a court or the Board in any proceeding that would be identified pursuant to paragraph (c)(1)(ii) of 37 CFR 41.37.